

CLAIMS:

1. Device for recording information in blocks having logical addresses, which device comprises

- recording means (22) for recording marks in a track on a record carrier representing the information, and
- 5 - control means (20) for controlling the recording by locating each block at a physical address in the track, the control means comprising
- addressing means (31) for translating the logical addresses into the physical addresses and vice versa in dependence on defect management information,
- 10 - defect management means (32) for maintaining the defect management information in defect management areas, the defect management information including remapping information indicative for translating a logical address initially mapped to a physical address exhibiting a defect to an alternate physical address in a defect management area,
- 15 - continuous data detection means (33) for detecting a logically continuous address range of blocks of information, in particular real-time data like digitally encoded video, and
- defect management reorganizing means (34) for
determining, via the defect management information, the physical addresses of remapped logical addresses in the logically continuous address range, and
- 20 reorganizing the defect management information by remapping at least one of the remapped logical addresses to a different physical address for facilitating read-out of the remapped logical addresses in the logically continuous address range from a single defect management area.

25 2. Device as claimed in claim 1, wherein the defect management reorganizing means (34) are for remapping the at least one of the remapped logical addresses to arrange that

- each remapped logical address in a first logical address range in the logically continuous address range is remapped to a first defect management area,

- each remapped logical address in a second logical address range in the logically continuous address range is remapped to a second defect management area, and
- the first and second address ranges are non-overlapping.

5 3. Device as claimed in claim 2, wherein the first defect management area and the second defect management area are physically consecutive.

10 4. Device as claimed in claim 1, wherein the defect management reorganizing means (34) are for remapping the at least one of said remapped logical addresses to arrange, for all remapped logical addresses in a logical address range in the logically continuous address range, a numerical order of corresponding physical addresses in the single defect management area corresponding to a numerical order of the remapped logical addresses.

15 5. Device as claimed in claim 1, wherein the continuous data detection means (33) are for detecting a condition for reorganizing defect management information by monitoring a streaming performance, in particular by monitoring a number of jumps to different defect management areas during executing a single read command.

20 6. Device as claimed in claim 1, wherein the defect management reorganizing means (34) are for performing the reorganizing as a background process.

7. Device as claimed in claim 1, wherein the continuous data detection means (33) are for detecting the continuous data

- from a continuous data indicator in a recording or reading command,
- 25 - from monitoring read or write commands exhibiting a streaming behavior,
- from detecting a streaming indicator in the information on the record carrier, and/or
- from analyzing file system information.

8. Device for reading information in blocks having logical addresses, which

30 device comprises

- reading means (30) for reading marks in a track on a record carrier representing the information,
- control means (20) for controlling the reading by locating each block at a physical address in the track, the control means comprising

- addressing means (31) for translating the physical addresses into the logical addresses and vice versa in dependence on defect management information, the defect management information at least including remapping information indicative for translating a logical address initially mapped to a physical address exhibiting a defect to an alternate physical address in a defect management area, and
- defect management reorganizing means (34) for

determining, via the defect management information, the physical addresses of remapped logical addresses in a logically continuous address range, and

- reorganizing the defect management information by retrieving, from a single defect management area, a number of blocks from physical addresses corresponding to a number of remapped logical addresses in an address range in the logically continuous address range, buffering the number of retrieved blocks, and providing at least one of the retrieved blocks when a remapped logical address is to be read.

9. Device as claimed in claim 8, wherein the defect management reorganizing means (34) are for said reorganizing the defect management information by retrieving the number of blocks before reading the blocks in the address range

10. Method of defect management for use in recording information in blocks having logical addresses, which recording comprises

- locating each block at a physical address in a track on a record carrier,
- translating the logical addresses into the physical addresses and vice versa in dependence on defect management information, and
- maintaining the defect management information in defect management areas, the defect management information including remapping information indicative for translating a logical address initially mapped to a physical address exhibiting a defect to an alternate physical address in a defect management area,

the method comprising

- detecting a logically continuous range of blocks of information, in particular real-time data like digitally encoded video,
- detecting, via the defect management information, the physical addresses of remapped logical addresses in the logically continuous address range, and
- reorganizing the defect management information by remapping at least one of the remapped logical addresses to a different physical address for facilitating read-out of

the remapped logical addresses in the logically continuous address range from a single defect management area.

11. Computer program product for defect management for use in recording
5 information, which program is operative to cause a processor to perform the method as claimed in claim 10.